

### About the approach and assumptions :

Initially we extract a tradebook only with entry, exit prices and entry, exit time as per the trade condition mentioned. That is short ATM straddle at 10.30 a.m. of the day, along with it long 2% away wings for protection and with a 30% stop loss, 80% take profit or square off at 3.20 pm condition for exit. So I assumed I would enter the trade at the open price of that candle and exit the trade at the close price of the candle where the exit signal is being generated. Here during the entry and exit we look for premium values of the contracts at the specified entry time/exit time, but if there are any missing values in at least one of the contracts, I assume to pick the data available from the next timestamp to execute the trade.

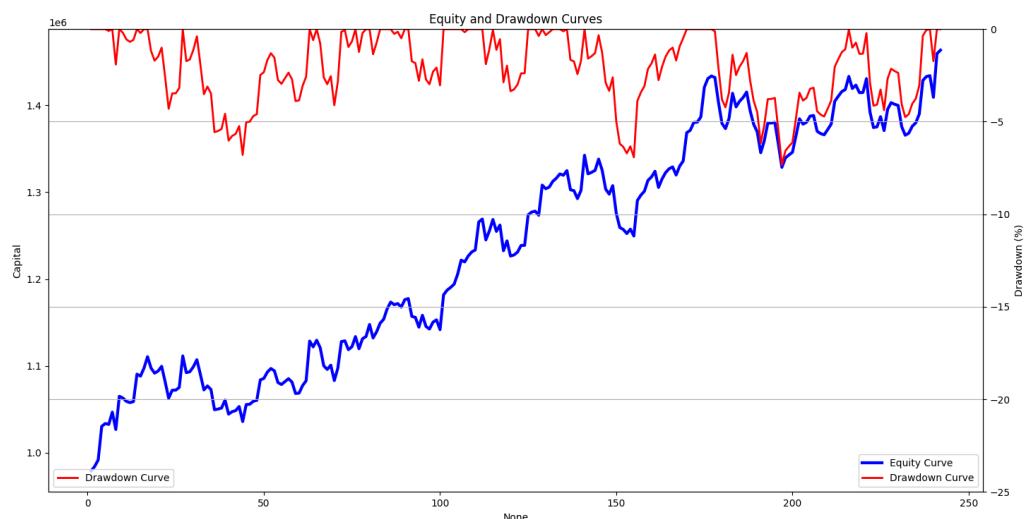
Then for PnL statements, we calculate margin requirements and the capital to be allocated to trade. Also it is assumed that we only use 80% of the total capital available to trade and the lot size is to be 15.

### Tradelog data :

```
{datetime.date(2017, 10, 19), datetime.date(2017, 2, 23), datetime.date(2017, 7, 20), datetime.date(2017, 7, 27), datetime.date(2017, 2, 22), datetime.date(2017, 7, 10)}
```

In the tradelog there are few missing trades on the above specified dates. This is because either there might be missing data in the futures OHLC data or the data of the option contracts that we take trade on, aren't available/ are missing.

### Final Equity-Drawdown Curve :



Equity - Drawdown graph